Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. – 14. (canceled)

15. (currently amended) A method for determining temperature <u>within a sealed container</u> comprising the steps of:

mixing a solvent with a compound to create a saturated solution <u>within the sealed container</u>;

allowing vapor of the saturated solution to equilibrate <u>within the sealed container</u>;

taking chromatographic readings of the equilibrated vapor; and

calculating a temperature based upon the chromatographic readings.

16. (original) The method of Claim 15 wherein the solvent comprises a liquid.

17. (original) The method of Claim 16 wherein the solvent comprises n-dodecane.

18. (original) The method of Claim 16 wherein the solvent comprises n-octadecane.

19. (original) The method of Claim 15 wherein the compound comprises a solid.

20. (original) The method of Claim 19 wherein the compound comprises

naphthalene.

21. (original) The method of Claim 19 wherein the compound comprises

anthracene.

22. (original) The method of Claim 15 wherein said mixing step comprises the

step of mixing a solvent with a compound to create a saturated solution within a

sealed container having a headspace, and wherein said allowing step comprises

the step of allowing vapor of the saturated solution to equilibrate in the headspace

of the sealed container.

23. (original) The method of Claim 15 wherein said calculating step comprises the

step of calculating a temperature based upon the chromatographic readings of the

equilibrated vapor, wherein the temperature calculation is based upon the

concentrations of the solvent and the compound in the equilibrated vapor.

24. (original) The method of Claim 23 wherein the chromatographic readings

comprise readings of peak areas of the solvent and the compound.

25. (original) The method of Claim 24 wherein said calculating step comprises

the step of calculating a temperature based upon a ratio of the readings of peak

areas of the solvent and the compound.